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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,279	08/22/2003	Thomas J. Batzinger	020354 073P2	9341
33805	7590	07/14/2004	EXAMINER	
WEGMAN, HESSLER & VANDERBURG 6055 ROCKSIDE WOODS BOULEVARD SUITE 200 CLEVELAND, OH 44131			YUN, JURIE	
			ART UNIT	PAPER NUMBER
			2882	

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



**Office Action Summary**

Application No.

10/646,279

Applicant(s)

BATZINGER ET AL.

Examiner

Jurie Yun

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/10/03</u> .  | 6) <input type="checkbox"/> Other: _____                                    |



### DETAILED ACTION

#### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification discloses use of X-rays, and there is no teaching for any and all kinds of radiation such as, for example, radiowaves, infrared, etc. In order to overcome this rejection, it is suggested to recite "x-ray source" instead of "radiation source."

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 6-11, and 16-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Morgan et al. (USPN 5,420,427).
5. With respect to claim 1, Morgan et al. disclose a system for high-speed radiographic inspection of a fluid transport vessel, said system comprising: (a) a



radiation source (Fig. 2, 58) and a radiation detector (60), said source being aligned with said detector longitudinally along an outside surface of said vessel (Fig. 1A, 18), said source and said detector being positioned on opposite sides of said outside surface; (b) first positioning means for moving said source and said detector longitudinally with respect to said vessel (column 6, lines 32-37); (c) second positioning means for moving said source and said detector circumferentially with respect to said vessel (column 6, lines 32-37); (d) a controller for controlling said first and said second positioning means (column 2, lines 44-55); and (e) a real-time imaging unit wherein said imaging unit receives image data signals from said detector (abstract).

6. With respect to claim 16, Morgan et al. disclose a method for high-speed radiographic inspection of a fluid transport vessel, said method comprising: (a) providing a radiation source (Fig. 2, 58) and a radiation detector (60), said source being aligned with said detector longitudinally along an outside surface of said vessel; and (b) causing said source and said detector to move longitudinally with respect to said vessel while said source is illuminating an adjacent region of said vessel with radiation (column 5, lines 36-48).

7. With respect to claim 2, Morgan et al. disclose a display means operatively associated with said imaging unit (Fig. 2, 70).

8. With respect to claim 3, Morgan et al. disclose the first positioning means comprises two guide rails (Fig. 3, 82) disposed parallel to said vessel, and a carriage (84) slidably mounted on said guide rails to enable said carriage to move longitudinally with respect to said vessel and wherein said second positioning means comprises roller



means (see Fig. 4A) rotatably mounted on said carrier, and a wheel (54) resting on said roller means to enable said wheel to be turned circumferentially providing full azimuthal coverage with respect to said vessel.

9. With respect to claims 6, 8, and 10, Morgan et al. disclose the source is an X-ray source and the detector is an X-ray detector (column 5, lines 36-48).

10. With respect to claims 7, 9, and 11, Morgan et al. disclose CT means for converting said image data signals into corresponding three-dimensional CT images of said fluid transport vessel (abstract).

11. With respect to claim 17, Morgan et al. disclose causing said source and said detector to move circumferentially around said vessel while said source is illuminating an adjacent region of said vessel with radiation (column 5, lines 36-48).

12. With respect to claims 18 and 19, Morgan et al. disclose collecting image data signals from said detector; and displaying real-time two-dimensional images generated by processing said image data signals (abstract).

13. With respect to claim 20, Morgan et al. disclose collecting image data signals from said detector; and displaying three-dimensional CT images generated by CT processing said image data signals (abstract).

14. With respect to claim 21, Morgan et al. disclose causing said source and said detector to move in a coordinated manner so that one complete circumferential revolution of said source and said detector is completed in the time required for said detector to travel longitudinally a distance equal to the scanning width of said detector



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while said source is illuminating an adjacent region of said vessel with radiation (column 19, lines 20+).

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 4, 5, and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al. (USPN 5,420,427) as applied to claims 1 and 3 above, and further in view of Boyd et al. (USPN 5,014,293).

17. With respect to claim 4, Morgan et al. do not disclose the wheel is a C-ring. Morgan et al. disclose the wheel is a full ring. Boyd et al. disclose an inspection apparatus having an X-ray source (Fig. 2, 32) and detector (33) in opposed positions on a C-ring (12). The Boyd et al. inspection apparatus is capable of moving longitudinally and circumferentially with respect to the inspection object. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Morgan et al. inspection apparatus to use a C-ring instead of a full ring, as taught by Boyd et al., to enable fitting around objects to be inspected even if the ends of the object are not free (column 1, lines 65-68).

18. With respect to claim 5, Boyd et al. disclose the first positioning means is a transport vehicle (Fig. 1, 19) and the second positioning means is an articulating C-arm (see Fig. 2). It would have been obvious to one of ordinary skill in the art at the time the



invention was made to modify the Morgan et al. inspection apparatus to include a transport vehicle and an articulating C-arm, as taught by Boyd et al., because Morgan et al. is also concerned with mobility of the apparatus, and having these elements would offer more benefits of mobility.

19. With respect to claims 12 and 14, Morgan et al. disclose the source is an X-ray source and the detector is an X-ray detector (column 5, lines 36-48).

20. With respect to claim 13, Morgan et al. disclose CT means for converting said image data signals into corresponding three-dimensional CT images of said fluid transport vehicle (abstract).

21. With respect to claim 15, Morgan et al. disclose CT means for converting said image data signals into corresponding three-dimensional CT images of said fluid transport vessel (abstract).

### ***Conclusion***


22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jurie Yun whose telephone number is 571 272-2497. The examiner can normally be reached on Monday-Friday 8:30-5:00pm.

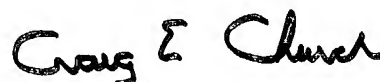
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 Jurie Yun  
July 7, 2004



Craig E. Church  
Primary Examiner